Seminar in Quantitative Finance: Portfolio Management

Outline:

The seminar provides an introduction to security and portfolio analysis, the problem of optimal allocation of assets into a portfolio, as well as the evaluation of investments. Topics which will be discussed in the seminar include:

- classical mean-variance portfolio theory (risk and return, efficient frontier)
- determination of equililbrum security returns and prices (CAPM, arbitrage pricing models, empirical tests)
- analysis and valuation of securities (such as stocks, bonds, options, etc.)
- evaluation of portfolio performance (performance measurement, diversification, active portfolio management)

The seminar, which will be held in English, is offered for students in the Finance profile of the M.Sc. Economics, but is also open to students of M.Sc. Volkswirtschaftslehre and M.Sc. Mathematics, especially to those of the profile "Finanzmathematik".

Instructor:

Prof. Dr. Eva Lütkebohmert-Holtz, Department of Quantitative Finance, University of Freiburg

Participants:

This course is primarily intended for students in the second year of the master program, and can be regarded as preparation for potential master theses.

Pre-registration is required. Interested students are asked to register via email to Mrs. Manzoni until *July 31st, 2016* (roberta.janosi@finance.uni-freiburg.de). Applications should indicate the course of studies, the number of terms, and should include a recent transcript as well as a short CV.

Prerequisites:

Principles of Finance, Futures and Options.

Course Schedule:

The course will take place on a weekly basis on *Tuesdays from 2-4 pm.* The lecture hall will be announced in due course on our website. The first meeting will take place on Tuesday, October 18th, 2016.

ECTS (credit points):

6 ECTS points based on

- an oral presentation of an individual seminar topic
- an executive summary (1 page) and a short but precise and meaningful seminar paper (not more than 3 pages plus references, tables and graphs) together with a well documented implementation of the performed numerical simulations in the software R or Matlab if the topic involves any numerical implementations
- an active participation during the whole course

The course can be dropped without penalty until September 30th, 2016. Thereafter, withdrawal will count as a failed examination attempt!

Main References:

Bodie, Z., Kane, A., Marcus, A.J. (2011): *Investments and Portfolio Management*. 9th ed., McGraw-Hill.

Elten, E.J., Gruber, M.J., Brown, S.J., and Goetzmann, W.N. (2011): *Modern Portfolio Theory and Investment Analysis*, 8th ed., Wiley.

Hull, J. (2011). *Options, Futures and other Derivatives*, 8th ed., Prentice Hall.

Spremann, K. (2008): *Portfoliomanagement*, 4th ed., Oldenbourg Verlag.

Additional Information:

http://www.finance.uni-freiburg.de/studium-und-lehre-en